2212 INSTRUCTION MANUAL

KINETIC SYSTEMS, INC.
VIBRAPLANE MODEL 2212
ACTIVE-AIR
TABLETOP ISOLATION PLATFORM

The Quality Leader in Vibration Isolation

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Section I

As You Begin:

Congratulations! The VIBRAPLANE Model 2212 Platform you have purchased has been designed by Kinetic Systems, Inc. for many years trouble-free user service. It will deliver superior vibration isolation performance for a broad range of research, quality assurance, and production applications.

The 2212 Platforms feature and active self-leveling isolation system, which when connected to an external low pressure air/gas source, automatically maintains a preset level unaffected by removal or addition of load.

The maximum net load capacity of the 2212-01 and the 2212-02 isolation systems are 275 lbs. and 450 lbs. respectively at 80 psi.

In order to get full benefit from your VIBRAPLANE Model 2212 platform, we suggest you follow the easy, step-by-step set up and operation instructions in this Manual.

Technical Assistance:

Need Technical Assistance? First, refer to the "Troubleshooting" Section of this Manual. If your problem persists, the technical support staff at Kinetic Systems, Inc. will be glad to answer any questions. Just telephone us at (617) 522-8700, or Fax (617) 522-6323 or Email kineticsystems.com.

Damage due to shipping:

When your VIBRAPLANE Model 2212 arrives, inspect it carefully for any damage due to shipping. *IF ANY DAMAGE IS DETECTED, NOTIFY THE SHIPPING CARRIER IMMEDIATELY. SAVE ALL PACKING MATERIALS.*

Section II

Set Up Procedure:

Refer to Fig. 1 for an outline view of your VIBRAPLANE Model 2212 Platform's size and layout.

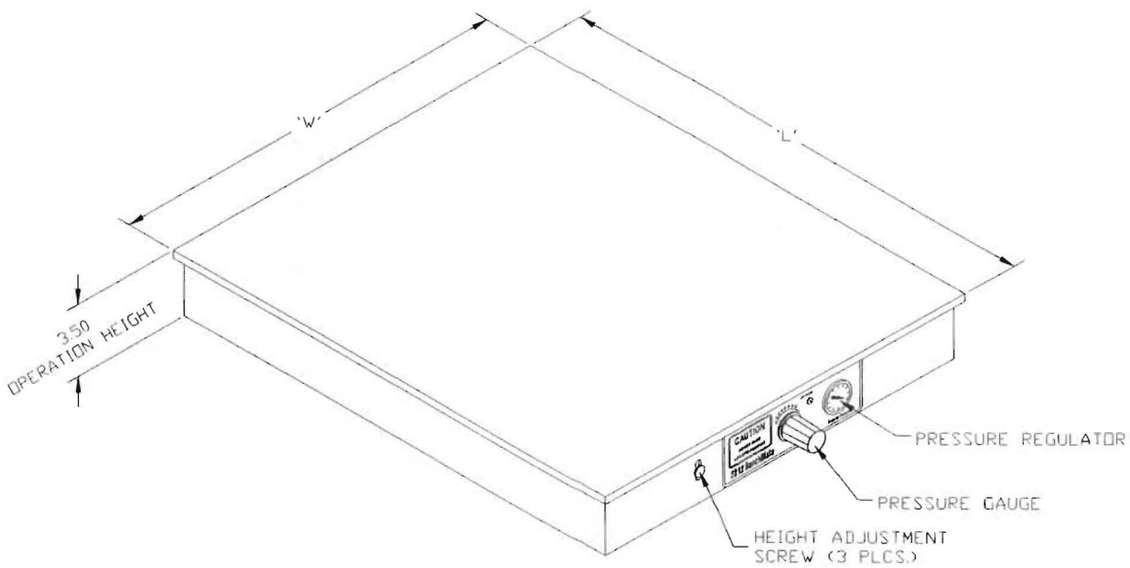

Fig. 1 Outline View of 2212 VIBRAPLANE Platform.

Due to its size and weight, you should take care in lifting and moving your Vibraplane 2212 (two people recommended) and should insure that it is placed on a sturdy tabletop like surface or base. Carefully remove all shipping materials (strapping, cardboard, etc.)

An approximate lifting or handling device is recommended for moving the 2212 tabletop platform. Provisions of which are to be made by user.

Place the Vibraplane Model 2212 Platform on top of a sturdy tabletop.

Place and center the equipment to be isolated on the platform. The system is now ready for operation using the compressed air fills; the umbilical assembly must be connected to an air supply.

CAUTION: When setting up your Vibraplane 2212, you should make sure that you **do not slide it into position on its base**. Always **lift and place it into position**, even when making small position adjustments. Sliding it into place can damage the isolator boots and result in improper inflation and compromised isolation performance.

Section III

Operation/Height Adjustment:

1. The VIBRAPLANE Model 2212 Platform is an Active-Air system, which will automatically adjust itself to the appropriate level after the system is initially adjusted.

2. Connect the VIBRAPLANE 2212 Platform to a clean, dry compressed air supply not exceeding 100 psi. Use the 10 ft. umbilical assembly furnished with the system.

3. For operation of the 2212 Active-Air Isolation system turn the pressure regulator knob clockwise raising the inlet pressure to between 72-80 psi.

4. Adjust the height of the system by turning the height adjustment screws clockwise to raise the system or counterclockwise to lower the system. There are three height adjustment screws, two for the front to back adjustment and one for the left to right adjustment. (as shown in Fig. 2, 3a and 3b).

5. Check to see if the platform is floating freely by pressing down and pulling up by hand on the platform top at each airmount location and releasing. If the platform does not float freely, inflate or deflate as necessary. Check for and remove any obstructions that may inhibit platform movement.

6. In properly inflated and level, floating height should be approximately 3 ¾ inches all around. For those who like to experiment, try different height from 3 ½ to 4 inches. Sonically, there will be differences depending on height.

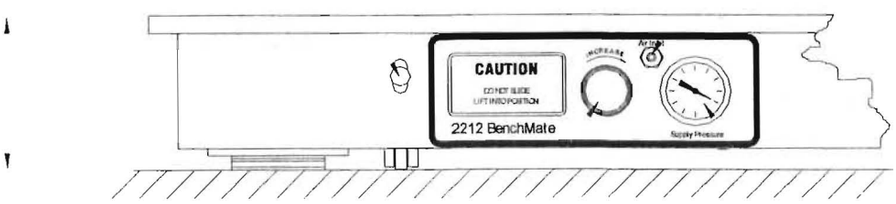

Fig. 2, 2212 Control Panel/Air Fill Illustration.

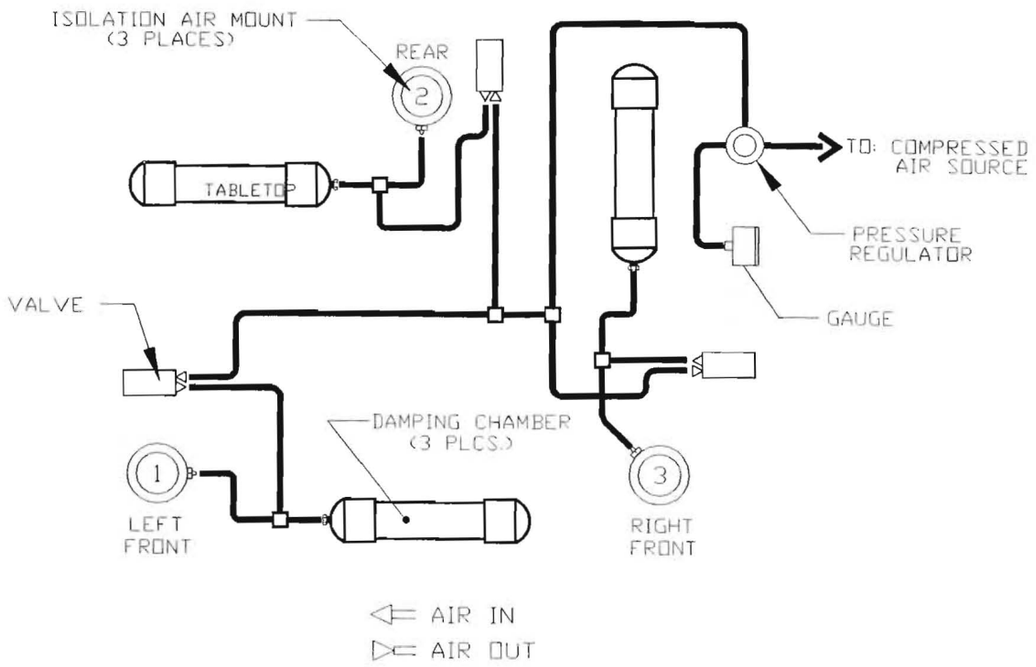

Fig. 3a, 2212-01 Airline Schematic.

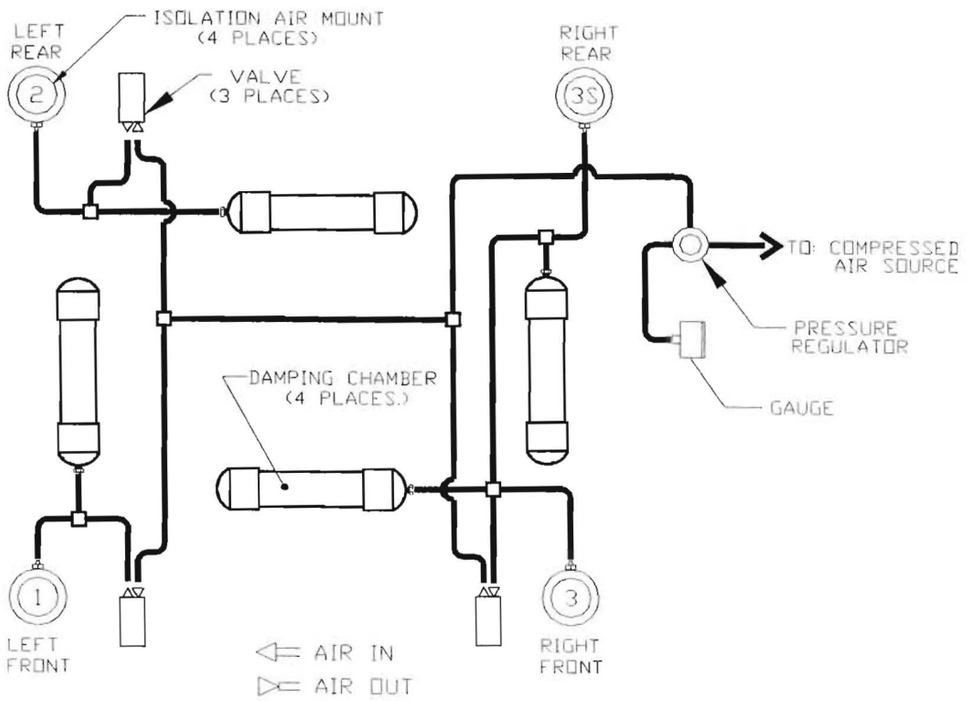

Fig. 3b, 2212-02 Airline Schematic.

Set-Up/Operation of Jun-Air Compressor
(Optional: For purchases with compressor only)

Caution!!! Before working on compressor:
1) Switch power to OFF position.
2) Always make sure the air receiver has been emptied of air.

Your compressor is very easy to operate. Observe the following, simple instructions, and you will get many years service from your compressor. Protect compressor against rain and moisture. (Refer to Fig. 4).

1. Remove the transportation cap from one of the air intake tube and attach the air intake filter. (This step may have been performed at the factory).

2. Filling of oil, if required add more oil. Use only genuine SJ-27 oil, which is obtainable from your supplier. Oil level is to be check once a week. The oil level must be visible in the glass.

3. Attach Filter/Regulator to straight outlet cock ensuring a tight fit. Pressure gauge should align with other pressure gauge affixed to compressor. When setting the regulator, the adjusting knob is turned clockwise until the required pressure can be read from the pressure gauge. Drain moisture from filter regularly.

4. Removing moisture is blow down receiver at least once a week. Close cock tightly afterwards.

5. Straight outlet cock should be in open/on position. See markings on red valve.

6. Drain cock should be completely closed. (Turn clockwise until shut).

7. Attach yellow tubing to extension piece just below drain cock. Other end of yellow tubing should be fitted through plastic bottle top. Plastic bottle should **Always** be in an upright position.

8. Attach supplied black tubing to VIBRAPLANE (to the brass barb fitting marked compressed air inlet). Attach the other end of the tubing to the barb fitting on the filter regulator.

9. Plug unit in switch Auto.

10. Set regulator on PEAK to between 80-85 psi by lifting knob and turning clockwise to increase pressure, counterclockwise to decrease pressure.

Section IV

Troubleshooting:

The purpose of this section is to aid the user in the diagnosis and repair of any minor problems that may occur. If your difficulty persists, call Kinetic Systems, Inc.'s technical support staff for assistance.

Symptom: Platform Will Not "Float"	
Possible Causes	**Probable Solutions**
Supported Load too Heavy	Reduce load to system capacity
Supported load uneven	Redistribute load evenly
Gross air leak	Locate leak and repair.

Symptom: Platform "Floats" but Will Not Isolate	
Possible Causes	**Probable Solutions**
Rubbing between Platform Airmount.	Reposition Platform.
Foreign object between Platform and Airmount	Remove foreign object.
Piston or pistons too high.	Lower the piston(s) by turning height adjustment screws counterclockwise (see Fig. 2).
Piston or pistons too low.	Raise the piston(s) by turning height adjustment screw and adding air. (see Fig. 2).

Section V

Recommended Spare Parts:

While maintenance requirements for the VIRBAPLANE Model 2212 Platform are minimal, some parts can be damaged if the system is improperly moved. In order to avoid any inconvenience, Kinetic Systems, Inc. recommended that user maintain a spare parts inventory of possible replacement items. These items are listed below:

Model No.	Quantity	Part No.	Description
2212-01	3	120126-03	Isolator (airmount) Assembly.
2212-02	4	120126-03	Isolator (airmount) Assembly.
2212-01/02	3	123206-01	Valve. Assembly.

Section VI

Replacement Isolator Installation:

The following instructions explain how to install a replacement isolator for your 2212 Platform.

Required Materials:

-- Replacement isolator (as per specification).

Required Tools:

-- Wrench supplied with Vibraplane.

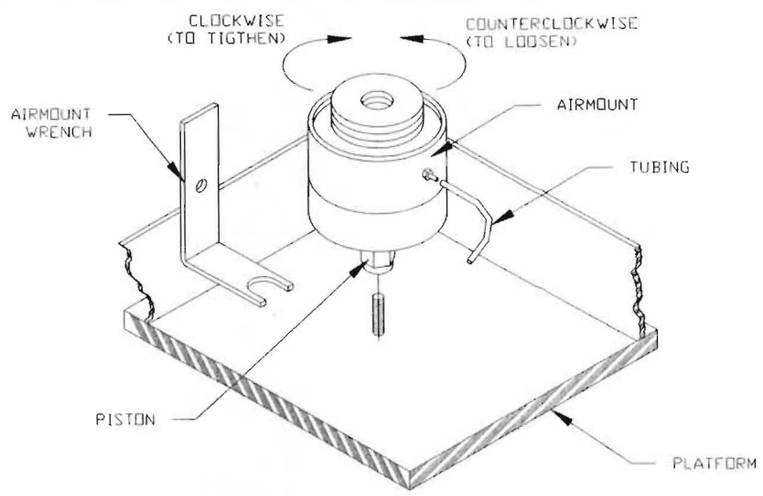

Fig. 5 Isolator (Airmount) Replacement.

1. Turn the platform over.
2. Remove the airline (tubing) attached to the airmount (isolator).
3. Using the wrench provided remove the damaged airmount, by unscrewing it from the Platform.
4. Replace the airmount by screwing it onto the platform, then check for level condition.
5. Attach the airline to the new airmount.
6. The VIBRAPLANE Model 2212 Platform is now ready for operation.

Warranty

Equipment manufactured by Kinetic Systems, Inc. (KSI) is warranted against defective workmanship and materials for one (1) year from date of delivery. Defective material or items will be replaced at no charge.

This warranty does not include labor to remove and install the material or item in question. Material returned under Warranty will not be accepted without the prior approval and assignment of a Return Authorization Number by KSI.

All returns must be shipped Freight Prepaid unless KSI authorizes otherwise. In those instances where returns must be by Mother Freight (truck), KSI will furnish the proper commodity rate classification for lowest shipping cost.